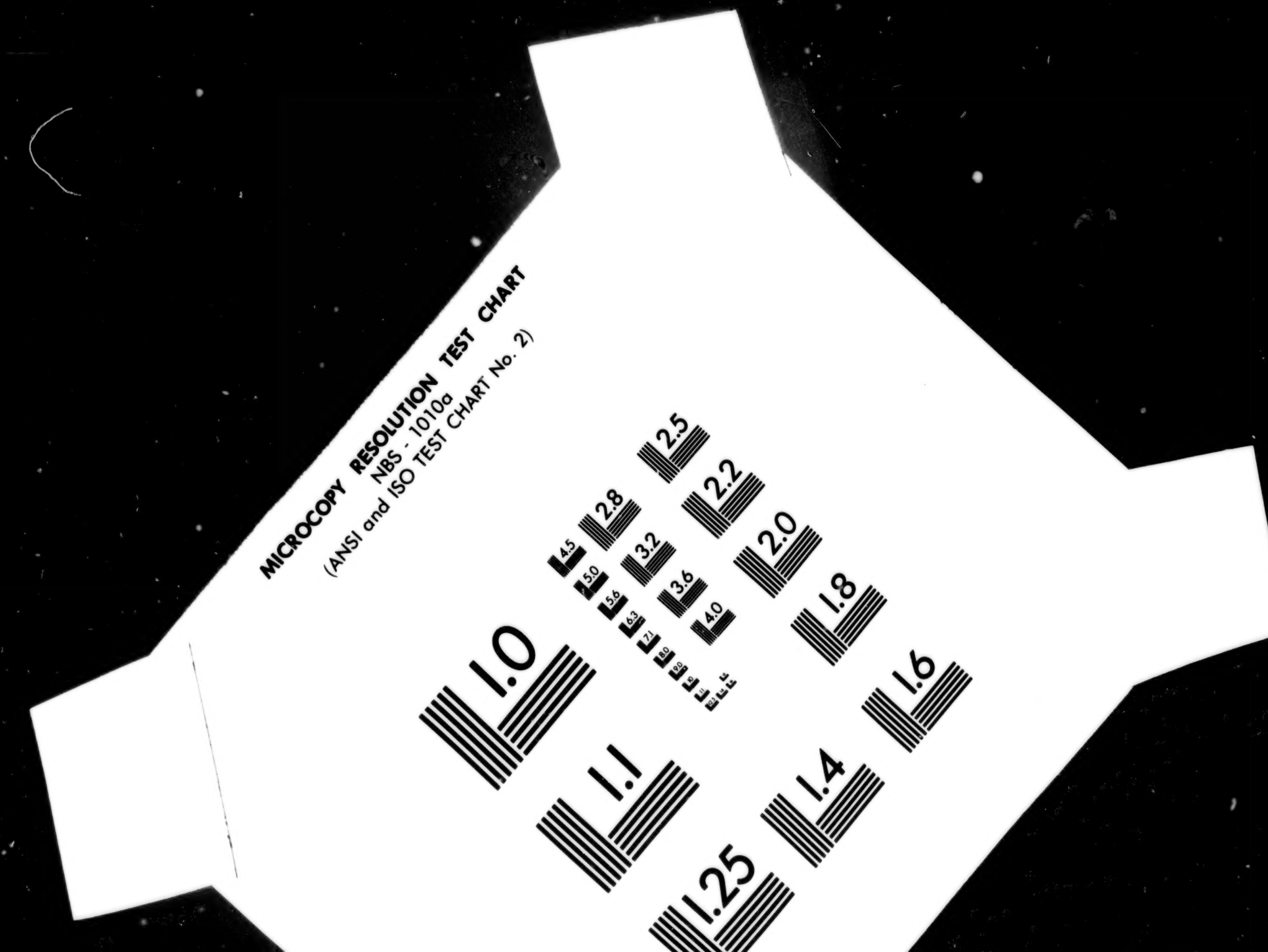
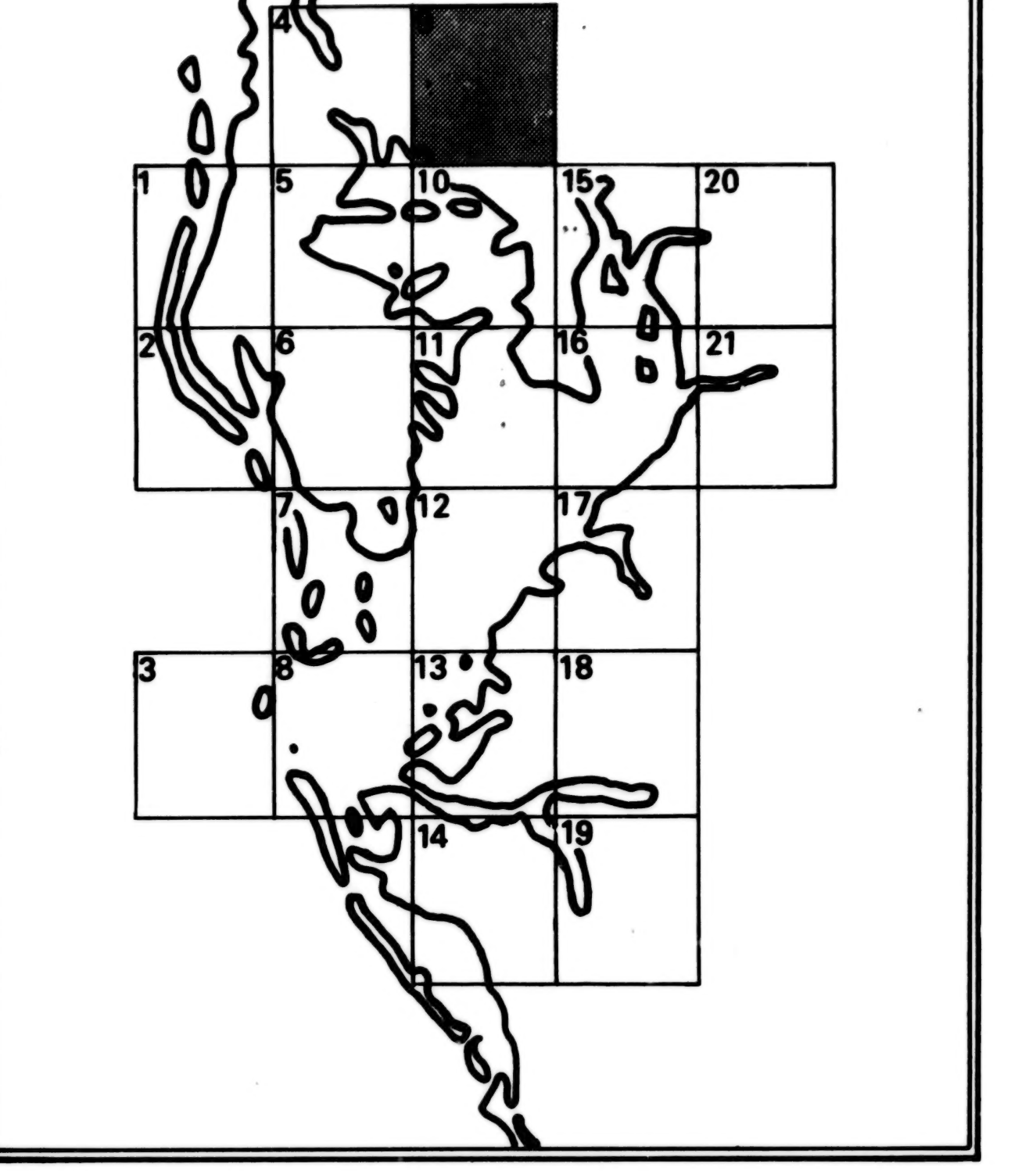
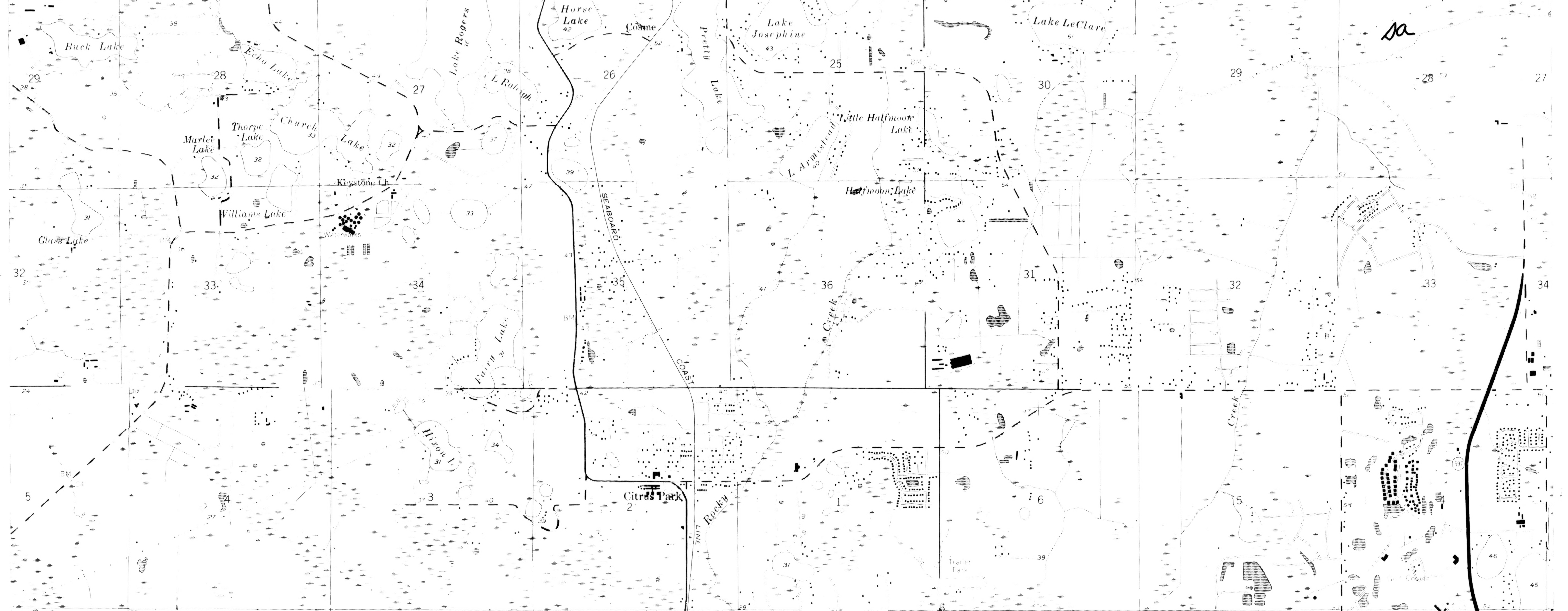




37'30"



Scale 1:24,000



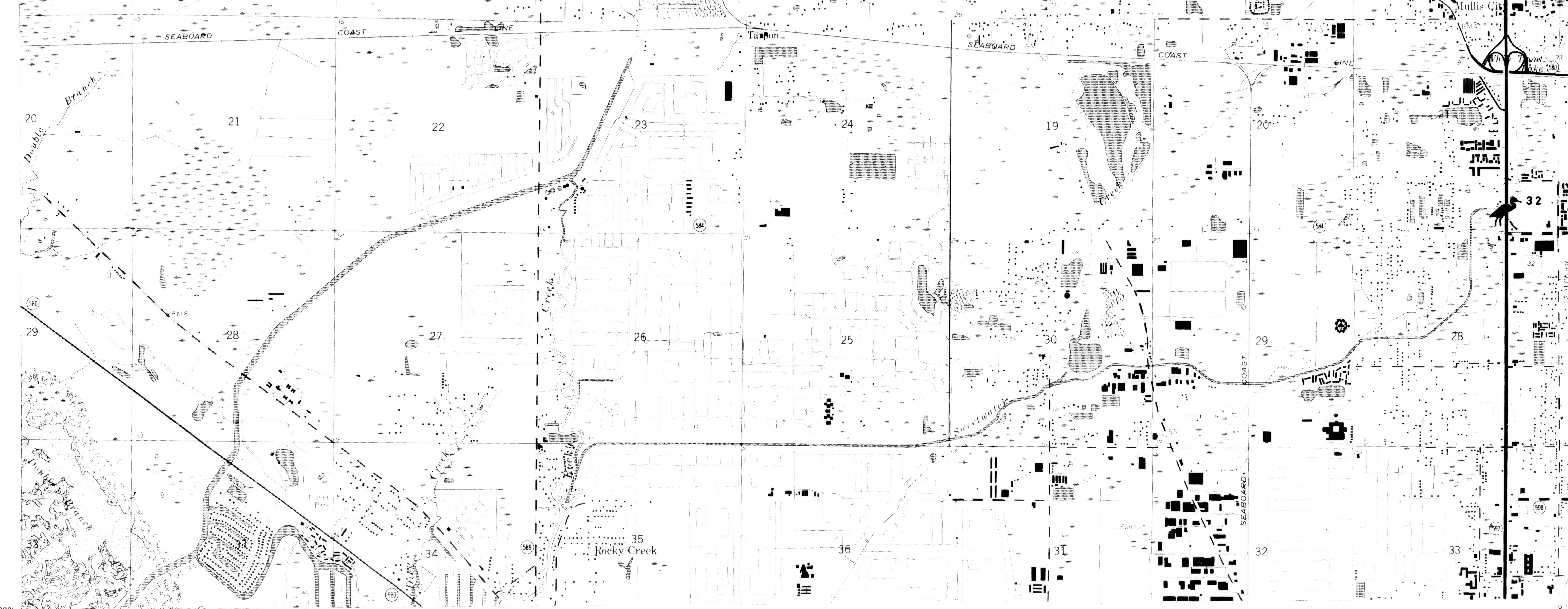
1984



TOPICAL MAPS IN THIS ATLAS:
A. BIOLOGICAL RESOURCES
B. WATER RESOURCES

Produced by U.S. Fish and Wildlife Service
Projection and 1,000 meter grid, zone 17: Universal
Transverse Mercator
10,000-foot grid ticks based on Florida coordinate
system, east and west zones

Overlay material compiled in 1984 from
latest available data obtained from



FINFISH SPAWNING, NURSERY AND HARVEST AREAS
(Recreational Hook and Line Fishing)

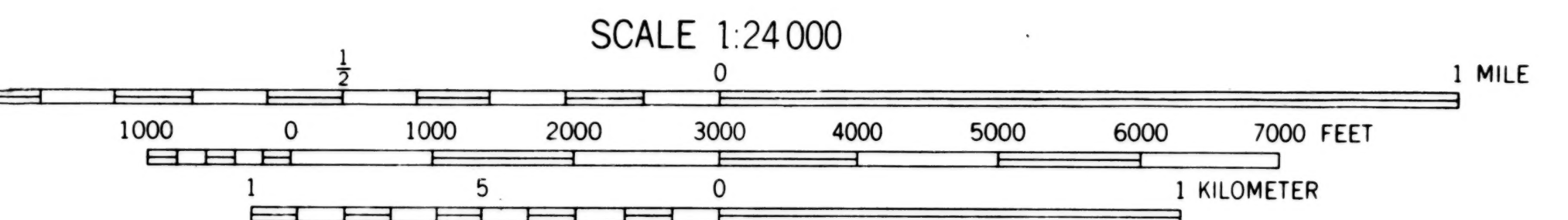
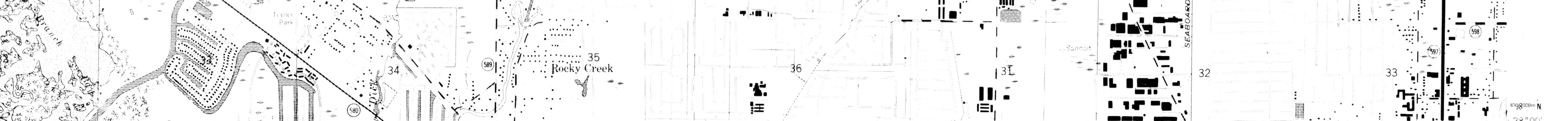
CATEGORY	FINFISH Common Name	SPAWNING		NURSERY AREA	MAJOR NURSERY HABITATS						MAJOR ADULT HABITATS								
		LOCATION	SEASON		Seagrass	Mangrove	Saltmarsh	Beach	Coral Reef	Artificial Reef	Open Water	AREA OF ADULT ABUNDANCE	Seagrass	Mangrove	Beach	Coral Reef	Artificial Reef	Open Water	
ESTUARINE DEPENDENT FISHES																			
	Red Drum	C	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Spotted Seatrout	E	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Snook	C	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Sheepshead	C	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Southern Flounder	C	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Florida Pompano	CS	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Striped Mullet	CS	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Gulf Menhaden	C	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Spanish Sardine	C	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Black Drum	C	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
REEF FISHERIES																			
	Red Grouper	CS	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Jewfish	CS	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Gag Grouper	CS	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Scamp	CS	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Red Snapper	CS	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Mangrove Snapper	CS	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
COASTAL PELAGIC FISHERIES																			
	King Mackerel	OCS	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	Spanish Mackerel	CS	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

KEY:
E — Estuarine
C — Coastal
CS — Continental Shelf
OCS — Outer Continental Shelf

MIGRATION TYPE:
1 — Residentially Restricted
2 — Random Residential Range
3 — Restricted Migration
4 — Extensive Migration

COLONIAL BIRD NESTING SITE*
Number appearing with symbol indicates colony sites. Colony sites and species composition data are included in the narrative.

Shorebird
Wading Bird
Brown Pelican



THE TAMPA BAY ENVIRONMENTAL ATLAS WAS PRODUCED BY THE U.S. FISH AND WILDLIFE SERVICE, DIVISION OF BIOLOGICAL SERVICES NATIONAL COASTAL ECOSYSTEMS TEAM (FWS/OBS) FOR COASTAL PLANNERS, DECISION MAKERS AND THE GENERAL PUBLIC, TO DETERMINE AND EVALUATE CHANGE AND TO RESOLVE CONFLICTS AMONG LAND USES, FISH AND WILDLIFE REQUIREMENTS AND THE MAINTENANCE OF ECOLOGICAL DIVERSITY. THE STUDY AREA INCLUDES A MAJOR PORTION OF THE COASTAL COUNTIES OF PINELLAS, HILLSBOROUGH, MANATEE, AND A SMALL PORTION OF SARASOTA. THERE IS NO ATTEMPT, IN THE DESIGN OR PRODUCTS OF THIS STUDY, TO DEFINE THE LIMITS OF PROPRIETARY JURISDICTION OF ANY FEDERAL STATE, OR LOCAL GOVERNMENT TO ESTABLISH THE GEOGRAPHICAL SCOPE OF THE REGULATORY PROGRAMS OF GOVERNMENT AGENCIES.

THIS MAP HAS BEEN COMPILED FROM A VARIETY OF SOURCE MATERIALS INCLUDING MAPS, AERIAL PHOTOS, AND REPORTS. SINCE MANY SOURCES CONTAINED GENERALIZED LOCATIONS OF RESOURCES AND OTHER MAPPED FEATURES, THE USER SHOULD NOT RELY ON THESE MAPS FOR PRECISE MEASUREMENTS OF DISTANCES OR AREAS.

PRIMARY SOURCES OF MAPPED INFORMATION:

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PUBLIC & PRIVATE OYSTER BEDS: Cooperative Gulf of Mexico Estuarine Inventory and Study, Florida, McNulty, Lindell and Sykes, 1972.

CLAMS: Personal Communication, Discussion of Distribution Clams in Tampa Bay and Adjacent Brackish Waters, Mr. L. Tracy Three T's Clam Company, 1983. Mike Sprague, Draft Maps, Department of Natural Resources, 1984.

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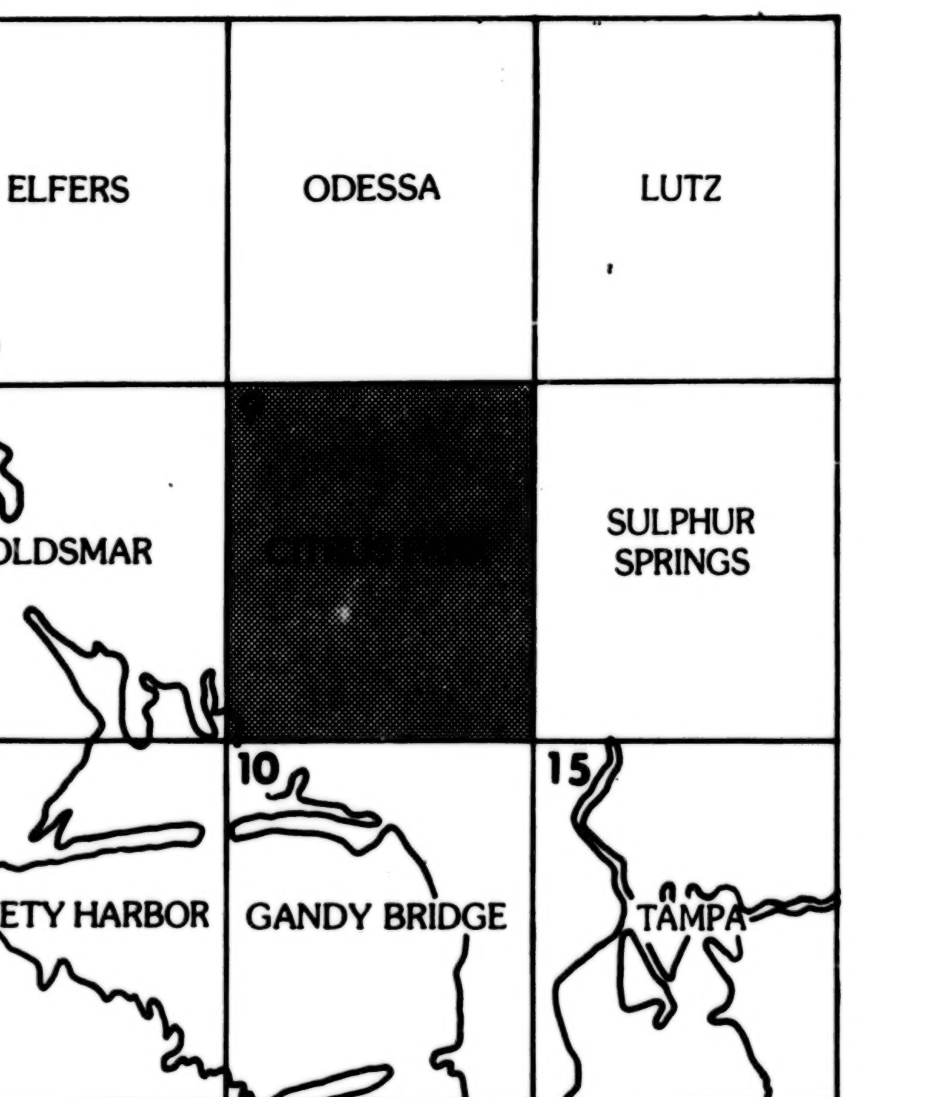
BIRD NESTING SITES: Florida Atlas of Breeding Sites for Herons and Their Allies: 1976-78, Nesbitt, S.A., Ogden, J.C., Kale II, H.W., et al. U.S. Fish and Wildlife Service, 1982. Personal Communication, Maps and Data, Dr. H.W. Kale II, Florida Audubon Society, 1982.

MANATEE HABITAT: Boaters guide to Manatees, the gentle giants, Florida Marine Patrol, 1980.

SEAGRASS BEDS: Tampa Bay Seagrass Maps, 1:10,000 and 1:24,000 Scales, Mangrove Systems, Inc. 1980. National Wetlands Inventory Maps, 1:24,000 Scale, U.S. Fish and Wildlife Service, 1983.

ARTIFICIAL REEFS: Computer Printout of Florida Artificial Reefs, U.S. Army Corps of Engineers, 1981. Recreational Use Reefs in Florida: Artificial and Natural, Florida Sea Grant Program, 1979.

FOR COMPLETE REFERENCE SEE MAP NARRATIVE



- Shorebird
- Wading Bird
- Brown Pelican

- WEST INDIAN MANATEE HABITAT

- STATE MANATEE SANCTUARY

- SEAGRASS BEDS

- ARTIFICIAL REEF*

(Permitted by Florida Dept. of Environmental Regulation)
Numbers next to reefs refer to composition data in narrative

*Symbols appearing with numbers are described more fully in the narrative.

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